

REMARKS

Claims 1-19 were pending. Claim 18 has been cancelled. Claims 1-11 and 19 have been amended. Claims 20-22 have been added. Therefore, claims 1-17 and 19-22 will be pending upon entry of this amendment.

No new matter has been added. Claims 1-11 and 19 have been amended to clarify the invention. Support for the amendments to these claims can be found, for example, at least at page 9, line 28 of the specification as originally filed. Support for new claims 20-22 can be found, for example, at least at page 1, lines 12-14, page 8, lines 12-22, and page 43, Table 3.

Amendments to the claims should in no way be construed as an acquiescence to any of the Examiner's objections and/or rejections. The amendments to the claims are being made solely to expedite prosecution of the above-identified application. Applicants reserve the option to further prosecute the same or similar claims in the present or another patent application. The amendments made to the claims are not related to any issues of patentability.

Rejection of Claims 14-19 under 35 U.S.C. § 112, first paragraph

Claims 14-19 are rejected under 35 U.S.C. § 112, first paragraph. The Examiner alleges that the "specification, while being enabling for a method of treating a proliferative disorder of the type disclosed in Table 3 does not reasonably provide enablement for a method of treating proliferative disorders generally.

Applicants respectfully disagree with the Examiner's assessment that the specification does not reasonably provide enablement for treatment of the proliferative disorders claimed in the present application, other than disorders of the type disclosed in Table 3.

With respect to the mode of action of the compounds of the invention, Applicants would like to direct the Examiner's attention to page 8, line 23 to page 9, line 8 of the specification, where it is stated that the compounds of the present invention are delivered to exert their anti-proliferative effect in a non-protein kinase C (PKC) dependent manner. Furthermore, it is disclosed that many of the compounds inhibit cyclin-dependent kinase enzymes (CDKs) that have been shown to be involved in cell control.

With regard to the Examiner's allegation that tumor progression involves multiple mechanisms and that there is no single therapeutic approach in existence for the treatment of all tumors, Applicants respectfully submit that the skilled artisan would be able to determine which proliferative disorders could be treated with the compounds of the

present invention. It is disclosed in the specification that “an anti-proliferative effect within the scope of the present invention may be demonstrated by the ability to inhibit cell proliferation in an *in vitro* whole cell assay, for example using any of the cell lines A549, HT29, Saos-2, HeLa or MCF-7, or by showing inhibition of a CDK enzyme (such as CDK2 or CDK4) in an appropriate assay” (page 8, lines 15-19). Both of these assays have been exemplified in the present case.

In addition, Example 19 describes experimental protocols by which the kinase specificity of a selected compound may be assayed. Thus, assays for CDK4/Cyclin D1, CDK2/Cyclin E, CDK1/Cyclin B kinase may be carried out by monitoring the phosphorylation of GST-Rb. Alternatively, a CDK2/Cyclin A kinase assay can be conducted using recombinant CDK2/Cyclin A. In addition, Example 19 also discloses a suitable assay for the determination of PKC α kinase activity. The selectivity of various compounds of the present invention for the inhibition of CDK2/Cyclin E is given in Table 1 on page 41 of the application as filed.

Therefore, Applicants submit that it would not be an undue burden for a person skilled in the art to determine which proliferative disorders may be treated.

In addition, Applicants’ claims are directed to methods of treating a subject for a proliferative disorder by administering a compound of the invention, such that the CDK dependent proliferative disorder is treated. Therefore, Applicants’ claimed invention is directed *only* to methods wherein treatment of a proliferative disorder actually occurs after administration of the compound of the invention, and *not* to methods wherein treatment does not occur. Therefore, Applicants submit that the scope of the currently pending claims is fully enabled by the specification and respectfully request that this rejection of claims 14-19 be withdrawn.

Rejection of Claims 12-19 under 35 U.S.C. § 112, second paragraph

Claims 12-19 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter.

In particular, claims 12, 14, and 19 were rejected for lacking proper antecedent basis for the phrase “a pharmaceutically acceptable salt.” Applicants respectfully submit that this rejection no longer pertains to the claims as currently amended.

Claims 18 and 19 were rejected for being directed to a use of the compounds of the invention. It is respectfully submitted that claim 18 has been cancelled, thus rendering its rejection moot. Claim 19 has been amended such that it is now a method claim reciting active, positive steps.

Therefore, Applicants respectfully request that this rejection of claims 12-17 and 19 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Rejection of Claims 18-19 under 35 U.S.C. § 101

Claims 18 and 19 are rejected under 35 U.S.C. § 101 “because the claimed recitation of a use without setting forth any steps involved in the process, results in an improper definition of a process.” Applicants respectfully submit that claim 18 has been cancelled, thus rendering its rejection moot. In addition, claim 19 has been amended such that it is now a method claim reciting active, positive steps, and no longer claims a use. Therefore, Applicants respectfully request that this rejection of claim 19 under 35 § 101 be withdrawn.

Rejection of Claims 1-19 under 35 U.S.C. § 103 (a)

Claims 1-19 are rejected under 35 U.S.C. § 103(a) as being obvious over Wang *et al.* (WO 01/72745). Applicants traverse.

Applicants respectfully submit that WO 01/72745 is not prior art under § 103 (a) to the claims as currently amended. Without acquiescing that any of the originally filed compounds are in anyway obvious in view of WO01/72745, Applicants have amended the claims such that the remaining compounds are entitled to priority dates of September 28, 2001 and October 2, 2001. These dates are both prior to the publication date of WO 01/72745 (October 4, 2001), and, therefore, WO01/72745 is not prior art to the instant application under 35 U.S.C. § 103 (a).

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of this rejection of claims 1-19 under 35 U.S.C. §103 (a).

Rejection of Claims 1-19 under 35 U.S.C. § 103 (a)

Claims 1-19 are rejected under 35 U.S.C. § 103(a) as being obvious over Wang *et al.* (U.S. 6,531,479). Applicants traverse.

35 U.S.C. §103(c)(1) states that:

[s]ubject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of 35 U.S.C. §102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

U.S. Patent No. 6,531,479 has been cited by the Examiner as prior art under 35 U.S.C. §102 (e). Applicants respectfully submit that the inventions described in U.S. Patent No. 6,531,479 and the present application were commonly owned at the time the invention in this application was made, as evidenced by copies of the assignments submitted herewith at Appendices A-B, respectively. Therefore, Applicants respectfully request reconsideration and withdrawal of this rejection under 35 U.S.C. §103 (a).

Rejection of Claims 1-19 under 35 U.S.C. § 101

Claims 1-19 are provisionally rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1-19 of co-pending application 11/433,312. Applicants note that the currently pending claims of U.S.S.N. 11/433,312 and the instant application no longer claim the same subject matter. Therefore, Applicants respectfully request that this rejection of the claims under 35 U.S.C. § 101 be withdrawn.

Rejection of Claims 1-19 under Judicially Created Doctrine of Obviousness Type Double Patenting

Claims 1-19 are rejected on the grounds of obviousness type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,531,479. In particular, the Examiner is of the opinion that “[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because instantly claimed compounds are encompassed by [the] genus of the reference.”

While in no way admitting that Claims 1-19 are obvious over claims 1-23 of U.S. Patent No. 6,818,634, upon allowance of the present application but for the obviousness type double patenting rejection, Applicants will consider submitting a terminal disclaimer in compliance with 37 C.F.R. 1.321(b) and (c), if appropriate, which will obviate the rejection.

SUMMARY

It is respectfully submitted that this application is in condition for allowance. If there are any remaining issues or the Examiner believes that a telephonic conference with Applicant's Attorney would be helpful in expediting the prosecution of this application, the Examiner is invited to call the undersigned at (617) 227-7400.

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